Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Per.: \_\_\_\_\_\_\_\_

**Unit 2: Transformations Pre-Test**

Instructions: Circle the **best** answer to each question.

1. What does it mean for two objects to be congruent?

1. The objects must have the same size, shape, and orientation.

b. The objects must have the same size, shape, orientation, and location.

1. One object can be rotated, reflected, or translated so that it is lies over the other and all points will perfectly coincide.

d. One object can be rotated or translated so that it is lies over the other and all points will perfectly coincide. (Reflections are not congruent, because they do not have the same orientation.)

2. What kind of symmetry does the object on the right have?

|  |  |  |
| --- | --- | --- |
| a. Reflection symmetry | b. Rotation symmetry |  |
| c. Both reflection and rotation symmetry | d. No symmetry |

Answer questions 3 – 5 about triangle ABC and its image formed by rotation about point shown on the right.

3. Which side of the image corresponds to side of the original triangle?

|  |  |
| --- | --- |
| a. | b. |
| c. | d. |

4. Which *must* be true about segments and ?

|  |  |
| --- | --- |
| a. They have the same direction. | b. They are parallel. |
| c. They are congruent. | d. They are perpendicular. |

5. Which *must* be true about angles and ?

|  |  |
| --- | --- |
| a. They are complementary. | b. They are supplementary. |
| c. They are congruent. | d. They are adjacent. |

Answer questions 6 – 8 about the triangle and its image formed by reflection over line shown on the right.

6. Which statement *must* be true?

|  |  |
| --- | --- |
| a. | b. |
| c. | d. |

7. Which *must* be true about segments and ?

|  |  |
| --- | --- |
| a. They are congruent. | b. They are similar. |
| c. They are parallel. | d. They are perpendicular. |

8. Which *must* be true about segments and ?

|  |  |
| --- | --- |
| a. They are congruent. | b. They are similar. |
| c. They are parallel. | d. They are perpendicular. |